

Application No.: 10/781,989

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AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 80, 82 and 83 (canceled)

Claim 84 (currently amended): A method of producing a transgenic plant expressing an immunoglobulin comprising a protection protein in association with an immunoglobulin heavy chain having at least a portion of an antigen binding domain, wherein the protection protein comprises a portion of ~~a human, rat, mouse, rabbit or bovine polyimmunoglobulin receptor as defined in Table I~~ SEQ ID NO: 2, 4, 6, 8, or 10, comprising:

- a) introducing into a first plant an expression vector containing a nucleotide sequence encoding the protection protein operably linked to a transcriptional promoter,
- b) introducing into a second plant an expression vector containing a nucleotide sequence encoding the immunoglobulin heavy chain having at least a portion of an antigen binding domain operably linked to a transcriptional promoter,
- c) crossing said first plant and said second plant to produce offspring, and
- d) selecting from said offspring a transgenic plant expressing the immunoglobulin comprising the protection protein in association with the immunoglobulin heavy chain having at least a portion of an antigen binding domain.

Claim 85 (previously presented): The method of claim 84, wherein the transgenic plant is a monocot.

Claim 86 (previously presented): The method of claim 84, wherein the transgenic plant is a dicot.

Claim 87 (previously presented): The method of claim 86, wherein the transgenic plant is a tobacco plant.

Claim 88 (previously presented): The method of claim 84, wherein the transgenic plant is an alfalfa plant.

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Claim 89 (previously presented): The method of claim 84, further comprising introducing into said transgenic plant an expression vector encoding an immunoglobulin derived light chain having at least a portion of an antigen binding domain operably linked to a transcriptional promoter.

Claim 90 (previously presented): The method of claim 84, further comprising introducing said first plant an expression vector encoding an immunoglobulin derived light chain having at least a portion of an antigen binding domain operably linked to a transcriptional promoter.

Claim 91 (previously presented): The method of claim 84, further comprising introducing said second plant an expression vector encoding an immunoglobulin derived light chain having at least a portion of an antigen binding domain operably linked to a transcriptional promoter.

Claim 92 (previously presented): The method of claim 84, further comprising introducing into said transgenic plant an expression vector encoding an immunoglobulin derived J chain having at least a portion of an antigen binding domain operably linked to a transcriptional promoter.

Claim 93 (previously presented): The method of claim 84, further comprising introducing said first plant an expression vector encoding an immunoglobulin derived J chain having at least a portion of an antigen binding domain operably linked to a transcriptional promoter.

Claim 94 (previously presented): The method of claim 84, further comprising introducing said second plant an expression vector encoding an immunoglobulin derived J chain having at least a portion of an antigen binding domain operably linked to a transcriptional promoter.

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